

Amendments to the Specification:

Please amend the specification as follows:

Second Amendment of the paragraph on p.5, ln.32-p.6, ln.16:

In another aspect, the present invention provides for core/shell nanoparticle oligonucleotide conjugates, comprising a nanoparticle core, a gold shell surrounding the nanoparticle, and an oligonucleotide attached to the gold surface of the core/shell nanoparticle. The size of the nanoparticles is preferably from about 5 nm to about 150 nm (mean diameter), more preferably from about 5 to about 50 nm, most preferably from about 10 to about 30 nm. Any suitable method for attaching oligonucleotides onto a gold surface may be used. A particularly preferred method for attaching oligonucleotides onto a gold surface is based on an aging process described in U.S. application nos. 09/344,667, filed June 25, 1999; 09/603,830, filed June 26, 2000; 09/760,500, filed January 12, 2001; 09/820,279, filed March 28, 2001; 09/927,777, filed August 10, 2001; and in International application nos. WO 98/04740, filed July 21, 1997; WO 01/00876, filed June 26, 2000; WO 01/51665, filed January 12, 2001; WO 01/73123, filed March 28, 2001, the disclosures which are incorporated by reference in their entirety. The aging process provides nanoparticle-oligonucleotide conjugates with unexpected enhanced stability and selectivity. The method comprises providing oligonucleotides preferably having covalently bound thereto a moiety comprising a functional group which can bind to the nanoparticles. The moieties and functional groups are those that allow for binding (*i.e.*, by chemisorption or covalent bonding) of the oligonucleotides to nanoparticles. For instance, oligonucleotides having an alkanethiol, an alkanedisulfide or a cyclic disulfide covalently bound to their 5' or 3' ends can be used to bind the oligonucleotides to a variety of nanoparticles, including gold nanoparticles.